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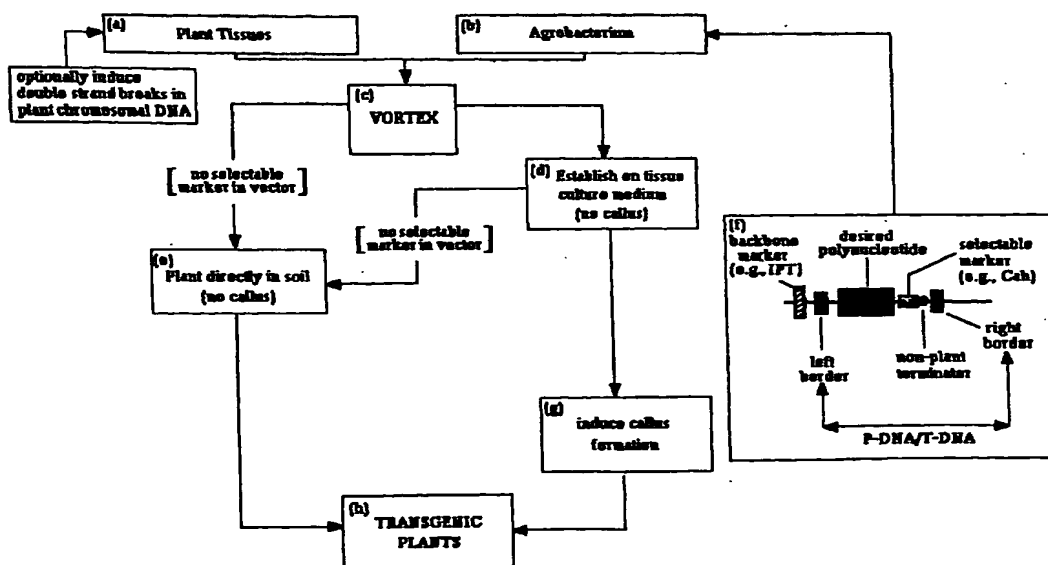
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- (71) Applicant (for all designated States except US): **J.R. SIMPLOT COMPANY** [US/US]; One Capital Center, 999 Main Street, Suite 1300, P.O. Box 27, Boise, ID 83702 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **WEEKS, J., Troy** [US/US]; 6150 S. Shagbark Avenue, Boise, ID 83716 (US).
- (74) Agent: **PEET?, Richard C.?**; **FOLEY & LARDNER LLP**, 3000 K Street, Suite 500, Washington, DC 20007-5143 (US).
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(54) Title: **REFINED PLANT TRANSFORMATION**



(57) Abstract: The present invention provides methods for producing transgenic plants based on an optimized transfer of DNA from Agrobacterium to plant cells, and/or on an optimized integration of the transferred DNAs into plant cell genomes. It also provides Agrobacterium-transformation vectors that can be used to limit or eliminate the transfer of undesirable DNA. The present invention can be applied to essentially any species of plants, including many recalcitrant plant species. The present invention also provides new cyanamide resistance marker genes and proteins for enhancing plant cell transformation.

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